

CLAIMS

Sub 17
1 An electronic board comprising:

a grid of *grid points* on a flat surface, where each *grid point* is a visible element which is capable of detecting when it is pressed, and can be illuminated in two different colours, allocated to respective players, by an illumination source inside or below the surface; and

a *game manager* made of

a CPU and memory, connected electronically to the grid points and illumination sources such that it has complete control on which grid point is illuminated and in what colour, and it is notified whenever any of the grid points is pressed, and a computer program which is executed by the CPU,

which manages a one or more games, of which at least one game is played according to these rules:

Each player in their turn switch on an unilluminated point with their colour by pressing it, provided it is a legal move;

the legality of a point for a player is evaluated by checking in turn each of a pre-defined set of imaginary straight lines emanating from the point, assigning a value of 0 to each of these lines that does not pass through an illuminated point, a value of 1 if the closest illuminated point that it passes through is illuminated with the colour of the player, and -1 if it is in the opponent's colour, then comparing the sum of the values of all the lines to a fixed number, and if the sum is larger or equal the point is a legal move for the player;

the game ends when neither of the players has a legal move, and the player with more points of his/her colour wins.

- 2 A board as described in Claim 1, where the arrangement of the points is square.
- 3 A board as described in Claim 2, where the set of virtual lines is the 8 lines emanating from the point and going through the closest 8 points.
- 4 A board as described in Claim 1, where the arrangement of the points is hexagonal.
- 5 A board as described in any preceding claim, where the fixed number which is used in determining the legality of a move is 0.
- 6 A board as described in any preceding claim, where pressing a point is done by special implement that causes a short circuit which the board uses to identify the point that is pressed.
- 7 A board as described in any preceding claim, where the players use, hold or wear a special implement which identifies which player is playing by communicating with the board.